



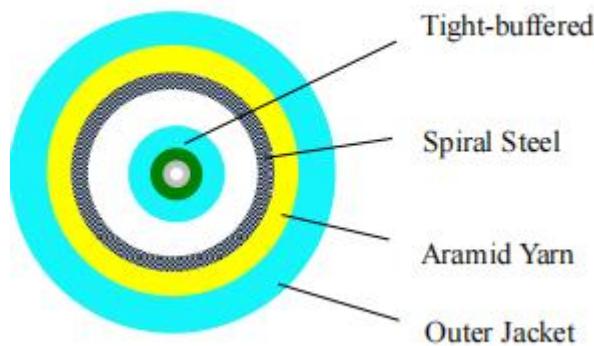
UnitekFiber

Shenzhen UnitekFiber Solution Limited

Indoor Armored Fiber Optical Cable GJSFJV 2.0mm 3.0mm Simplex

G.657A1Corning Jacket LSZH PVC

Cable Design



Technical data

No. of cable		1	
Fiber Model		G.657A1	
Tight lines	Material	PVC	
	Thickness (± 0.03) mm	0.32	
	Diameter (± 0.06) mm	0.9	
	Colour	White	
Strength Member	Material	Aramid Yarn&Water Blocking yarn	
Outer Sheath	Material	LSZH	
	Thickness (± 0.05) mm	0.65	
	Colour	Black	
Cable Diameter (± 0.2) mm		3.0	
Cable Weight (± 2) kg/km		8.0	
Attenuation	1310nm	dB/km	0.36
	1550nm		0.22
Allowable Tensile Strength	Short Term	N	1000
	Long Term		400
Allowable Crush Resistance	Short Term	N/100mm	100
	Long Term		30
Min. bending radius	Without Tension	10.0 \times Cable- ϕ	
	Under Maximum Tension	20.0 \times Cable- ϕ	
Temperature range (°C)	Installation	-20~+60	
	Transport&Storage	-40~+70	
	Operation	-40~+70	



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The properties of single mode optical fiber (ITU-T Rec. G.657A1)

Characteristic	condition	data	unit
Optical properties			
Attenuation	1310nm 1383nm(氢老化后) 1490nm 1550nm 1625nm	≤0.35 ≤0.35 ≤0.23 ≤0.22 ≤0.23	dB/km dB/km dB/km dB/km dB/km
Relative wavelength attenuation @1310nm @1550nm	1285~1330nm 1525~1575nm	≤0.05 ≤0.05	dB/km dB/km
Dispersion in the wavelength range of	1285~1340nm 1550nm	≤3.5 ≤18	ps/(nm.km) ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
A zero-dispersion slope		≤0.092	ps/(nm ² .km)
Polarization Mode Dispersion Coefficient PMD Single fiber maximum Fiber link value (M=20, Q=0.01%) Typical value		≤0.2 ≤0.1 0.04	ps/ ps/ ps/
Cable cut-off wavelength (λcc)		≤1260	nm
Mode field diameter (MFD)	1310nm 1550nm	8.8±0.4 9.8±0.5	μm μm
Attenuation discontinuities	1310nm 1550nm	≤0.05 ≤0.05	dB dB
Geometric characteristics			
Core diameter		125±0.7	μm
Cladding roundness		≤0.7	%
Coating diameter		245±5	μm
Coating / package concentricity error		≤12.0	μm
Core / package concentricity error		≤0.5	μm
The warpage (radius)		≥4	m
Environmental characteristics (1310nm、1550nm、1625nm)			
Temperature additional attenuation	-60℃ ~+85℃	≤0.05	dB/km
Temperature-humidity cycle additional attenuation	-10℃ ~+85℃, 98% Relative humidity	≤0.05	dB/km
Flooding additional attenuation	23℃, 30 days	≤0.05	dB/km
Hot and humid additional attenuation	85℃ and 85% Relative humidity, 30 days	≤0.05	dB/km
Dry heat aging	85℃	≤0.05	dB/km
Mechanical properties			
Screening tension		≥9.0	N
The macro bend Additional attenuation 10 CircleΦ30mm			



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10 CircleΦ30mm	1550nm	≤0.025	dB
1 CircleΦ20mm	1625nm	≤1.0	dB
1 CircleΦ20mm	1550nm	≤0.75	dB
	1625nm	≤1.5	dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

Sheath marking

The color of marking is white, but if the remarking is necessary, the white color marking shall be printed newly on a different position.

An occasional unclear of length marking is permitted if both of the neighboring markings are clear.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress.